

(b) Each access opening to a double bottom tank that is a dedicated ballast tank and that is located within a cargo containment system must be:

- (1) Enclosed in an access trunk extending to the weatherdeck;
- (2) Separated from the cargo containment system by two manhole coverings; or
- (3) Approved by the Commandant (GMSO).

[CGD 78-128, 47 FR 21207, May 17, 1982, as amended by CGD 82-063b, 48 FR 4782, Feb. 3, 1983]

CARGO CONTAINMENT SYSTEMS

§ 153.230 Type I system.

A type I containment system must meet the following requirements:

- (a) The vessel must meet the requirements in subpart F of part 172 of this chapter for a type I hull.
- (b) Except as described in § 153.235:
 - (1) It may be no closer to the tankship's shell than 76 cm (approx. 29.9 in.); and
 - (2) It may not be located in any part of the tankship subject to the damage described in Table 172.135 of this chapter for:
 - (i) COLLISION PENETRATION, Transverse extent; and
 - (ii) GROUNDING PENETRATION, Vertical extents from the baseline upward.

[CGD 73-96, 42 FR 49027, Sept. 26, 1977, as amended by CGD 79-023, 48 FR 51009, Nov. 4, 1983]

§ 153.231 Type II system.

A type II containment system must meet the following requirements:

- (a) The vessel must meet the requirements in subpart F of part 172 of this chapter for a type I or II hull.
- (b) Except as allowed in §§ 153.7 and 153.235—
 - (1) It may be no closer to the tankship's shell than 76 cm (approx. 29.9 in.); and
 - (2) It may not be located in any part of the tankship subject to the damage described in Table 172.135 of this chapter for GROUNDING PENETRATION,

Vertical extent from the baseline upward.

[CGD 73-96, 42 FR 49027, Sept. 26, 1977, as amended by CGD 79-023, 48 FR 51009, Nov. 4, 1983; CGD 81-101, 52 FR 7781, Mar. 12, 1987]

§ 153.232 Type III system.

A type III containment system must be in either a type I, II, or III hull. The requirements for type I, II, and III hulls are in subpart F of part 172 of this chapter.

[CGD 79-023, 48 FR 51009, Nov. 4, 1983]

§ 153.233 Separation of tanks from machinery, service and other spaces.

(a) To prevent leakage through a single weld failure, the following spaces must be separated from a cargo by two walls, two bulkheads, or a bulkhead and a deck not meeting in a cruciform joint:

- (1) Machinery spaces.
- (2) Service spaces.
- (3) Accommodation spaces.
- (4) Spaces for storing potable domestic, or feed water.
- (5) Spaces for storing edibles.
- (b) Some examples of arrangements that may separate cargo from the spaces listed in paragraph (a) of this section are the following:
 - (1) Dedicated ballast tanks.
 - (2) Cargo pumprooms.
 - (3) Ballast pumprooms.
 - (4) Tanks not carrying a cargo listed in this part.³
 - (5) A cofferdam aft of the cargo containment systems and whose forward bulkhead is forward of any joint common to an accommodations space and the deck.
 - (6) Double walled piping or a piping tunnel.

§ 153.234 Fore and aft location.

Except as allowed in § 153.7, each ship must meet the following:

- (a) Each cargo containment system and any compartments within which a containment system is located must be forward of a tankship's accommodation spaces.
- (b) Except as described in § 153.235, each cargo containment system must

³See also §§ 32.56-5 and 32.60-10 of this chapter for limitations on the stowage of combustible liquids adjacent to ignition sources.